

(19) World Intellectual Property
Organization
International Bureau



550 893

(43) International Publication Date
7 October 2004 (07.10.2004)

PCT

(10) International Publication Number
WO 2004/085818 A1

(51) International Patent Classification⁷: **F02D 11/10,**
B60K 26/02, 41/04

Stefano [IT/TT]; Corso Adriatico, 347/4/E, I-10095
Grugliasco (IT).

(21) International Application Number:
PCT/EP2004/003105

(74) Agents: **QUINTERNO, Giuseppe** et al.; Jacobacci &
Partners SpA, Corso Regio Parco, 27, I-10152 Torino (IT).

(22) International Filing Date: 24 March 2004 (24.03.2004)

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
TO2003 A 000233 27 March 2003 (27.03.2003) IT

(71) Applicant (for all designated States except US): **FIAT
AUTO S.P.A.** [IT/IT]; Corso Giovanni Agnelli, 200,
I-10135 Torino (IT).

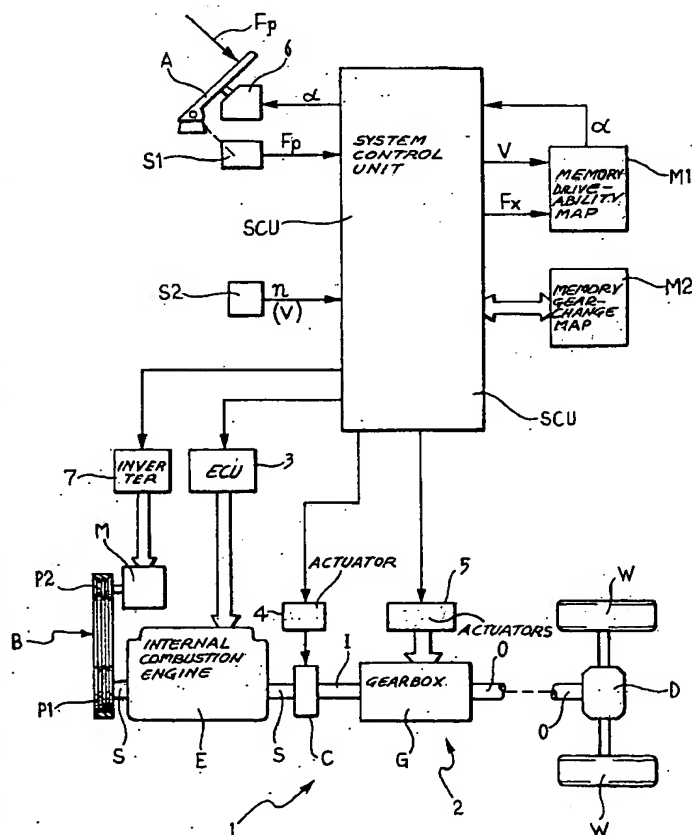
(72) Inventor; and

(75) Inventor/Applicant (for US only): **RE FIORENTIN,**

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A PROPULSION CONTROL SYSTEM FOR A MOTOR VEHICLE



(57) Abstract: The system controls the propulsion of a motor vehicle with a propulsion system (1) which includes an internal combustion engine (E) with a shaft (S) for coupling to a transmission (2). The system includes an accelerator (A) with an associated sensor devices (S1) for supplying electrical signals indicating the force (FP) applied on the accelerator (A) by the driver, and an actuator device (6) operable to alter the position of the accelerator (A); sensor devices (S2) supplying electrical signals indicating the speed of rotation (n) of the shaft (S) and/or the vehicle speed (V); and an electronic control unit (SCU) operable to control the propulsion system (1) in dependence on the signals supplied by the sensor devices (S1) and (S2). The control unit (SCU) acquires the signals generated by the sensor (S1) and establish an instantaneous value for the traction force (FX) to be developed on the ground by the drive wheels (W) corresponding to the instantaneous value of the force (FP) applied to the accelerator (A); and control the actuator device (6) in such a way that this latter tends to place the accelerator (A) in a position which corresponds to the instantaneous value of the vehicle speed (V).

WO 2004/085818 A1



Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD,*

- SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*
- *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.